



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/721,790

11/22/2000

Charles R. Simmers

113622-150366

3981

31817 7590 03/08/2010  
SCHWABE, WILLIAMSON & WYATT, P.C.  
PACWEST CENTER, SUITE 1900  
1211 S.W. FIFTH AVE.  
PORTLAND, OR 97204

EXAMINER

LEWIS, DAVID LEE

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

03/08/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/721,790	<b>Applicant(s)</b> SIMMERS, CHARLES R.	
	<b>Examiner</b> DAVID L. LEWIS	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 24-32 and 34-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 24-32 and 34-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/30/2008</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 4, 5, and 24-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al. (5881299) in view of Tagawa (5534892) and Pawlowski (5825341).**

**As in claim 1, Nomura et al. teaches of in an information device, figures 1-4, 7, and 8, having a CPU, figure 1 item 10, figure 8 item 100,**

**display controller, figure 1 item 14, figure 8 item 101,**

**and a display panel, figure 1 item 18a, figure 8 item 105a,**

**said display panel split logically into sub-panels, figure 1 item 18a (Area1 and Area2), figure 8 item 105a (Area1 and Area2),**

Art Unit: 2629

an apparatus comprising: a plurality of segment drivers coupled between said display panel and said display controller, said segment drivers receiving input data from said controller, said segment drivers translating said data into pixels displayable on said display panel , **figure 1 items 18 (b, c, d, e), figure 8 item 105(b, c, d),**

and a power control block coupled to said CPU and to said segment drivers to disable a first power source which powers down a first set of said segment drivers, **figure 1 items 20, figure 8 item 101,**

said powering down disabling a first set of sub-panels of said display panel from outputting pixels, **area2, column 6 lines 23-31, column 8 lines 24-55,**

said power control block disabling said first power source upon receiving a command from said CPU that said first set of sub-panels are to be powered down, **column 6 lines 23-31, column 8 lines 24-55,**

said information device functioning as one of a cellular communications device, and a personal digital assistant, **column 3 lines 29-47, column 4 lines 47-55, figure 1 items 28 and 12, figure 4 items area 1 and area 2, column 5 lines 20-25 and 63-64,**

said first set of sub-panels displaying information relevant to said personal digital assistant function, **figure 4 item area 2,** (phonebook name and number data),

Art Unit: 2629

further wherein said display panel includes a second set of sub-panels displaying information relevant to said cellular communications function, **figure 4 item area 1**, (cellular reception {electric field} signal and cellular power ), **column 5 lines 1-7**,

Wherein Nomura et al. teaches of a cellular communications device comprising a display partitioned into two areas, Area1 and Area2. The first area displays phone book data, and the second area displays electric field strength and battery power. As controlled by a CPU 10, the first and second display areas are capable of simultaneously display, as well as exclusive display, such that the second display area may be active while the first display area is powered off. The vertical resolution of the display is evidenced by the scan lines extending from the segment drivers 105c and 105d, of the first and second area. The vertical resolution is proportional to the size of the display division.

**However Nomura et al. fails to teach of** wherein said first and second sets of sub-panels comprise an **identical vertical resolution**.

**Nomura et al. does however teach** of said first and second sets of sub-panels comprising an identical horizontal resolution. With respect to the vertical resolution Nomura teaches of dividing the display 105 relative to the amount of information desired for the alternative mode of operation requiring less than the full display area. The identical vertical resolution of the sub display areas would have been an obvious design choice given the fact that providing alternative resolution sub display areas keep within the same inventive intent of Nomura. The inventive intent being reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area. The alternative resolution wherein the display areas Area1

Art Unit: 2629

and Area2 are equal in size, would allow for an equal vertical resolution given the horizontal resolution is also equal. Such an alternative would allow for reduced power operations when less than the full display area is being used. Therefore providing identical vertical resolution is facilitated by providing a display divided into two equally sized half's, which is an obvious design choice given Nomura inventive intent.

**Tagawa teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 3-7.

**Pawlowski teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 5.

Both Tagawa and Pawlowski are analogous art to Nomura et al. because they solve a similar problem directed towards display division and segmented driving. Both represent examples well known in the art of displays separated into two blocks and driven by different drive circuits.

**Therefore it would have been an obvious** design choice to the skilled artisan at the time of the invention to provide a display as taught by Nomura, with a first and second set of sub-panels that comprise identical vertical resolution, as taught by the divided display systems of Tagawa or Pawlowski because said feature is an obvious variation within the teaching of Nomura et al.'s two part display, consistent with the inventive intent to provide reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area, and further because both

Art Unit: 2629

Tagawa and Pawlowski suggest said feature is useful for providing display sub-panels, as found in claim 1.

**As in claim 4**, Nomura et al. teaches of wherein said information device has a normally open latch, said power control block to disable said first power source when said latch is closed, figure 1 item 26, column 4 lines 35-46.

**As in claim 5**, Nomura et al. teaches of in an information device, **figure 8**,

having a CPU, **figure 8 item 100**,

display controller, **figure 8 item 101**,

and two display panels, **figure 8 items Area1 and Area2**,

an apparatus comprising: a first set of segment drivers coupled to said display controller to receive as input a first set of data, said first set of segment drivers translating said first set of data into pixels output on a first of said display panels, **figure 8 items 105b and 105c**;

a second set of segment drivers coupled to said display controller and said first set of segment drivers to receive a second set of data, said second set of segment drivers translating said second set of data into pixels output on a second of said display panels, **figure 8 items 105b and 105d**;

Art Unit: 2629

and a power control block coupled to said CPU and to said first and second set of segment drivers to disable a first power source which powers down said second set of segment drivers, said powering down disabling said second display panel from outputting pixels, said information device functioning as one of a cellular communications device and a personal digital assistant, said second display panel displaying information relative to said personal digital assistant function, further wherein said first display panel displaying information relevant to said cellular communications function, **figure 8 items 101 and 106**, wherein the controller 101 coupled to the CPU 100 inputs power from the power supply 106, and controls input power for drivers 105, turning on/off the power supply of the liquid crystal under the control of the CPU, **column 7 lines 10-15, column 8 lines 10-67**,

Wherein Nomura et al. teaches of a cellular communications device comprising a display partitioned into two areas. The first area displays phone book data, and the second area displays electric field strength and battery power. As controlled by a CPU 100, the first and second display areas are capable of simultaneously display, as well as exclusive display, such that the second display area may be active while the first display area is powered off. The switching portion 101a of the display controller 101 helps it serve as a power control block for disabling power to the segment drivers in addition to distributing control information to the segment drivers for the purpose of displaying pixel information. The vertical resolution of the display is evidenced by the data lines extending from the segment driver 105b, common to the first and second display area.

**However Nomura et al. fails to teach of** wherein said first and second sets of sub-panels comprise an identical vertical resolution.



**Nomura et al. does however teach** of said first and second sets of sub-panels comprising an identical horizontal resolution. With respect to the vertical resolution Nomura teaches of dividing the display 105 relative to the amount of information desired for the alternative mode of operation requiring less than the full display area. The identical vertical resolution of the sub display areas would have been an obvious design choice given the fact that providing alternative resolution sub display areas keep within the same inventive intent of Nomura. The inventive intent being reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area. The alternative resolution wherein the display areas Area1 and Area2 are equal in size, would allow for an equal vertical resolution given the horizontal resolution is also equal. Such an alternative would allow for reduced power operations when less than the full display area is being used. Therefore providing identical vertical resolution is facilitated by providing a display divided into two equally sized half's, which is an obvious design choice given Nomura inventive intent.

**Tagawa teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 3-7.

**Pawlowski teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 5.

Both Tagawa and Pawlowski are analogous art to Nomura et al. because they solve a similar problem directed towards display division and segmented driving. Both represent examples well known in the art of displays separated into two blocks and driven by different drive circuits.

**Therefore it would have been an obvious** design choice to the skilled artisan at the time of the invention to provide a display as taught by Nomura, with a first and second set of sub-panels that comprise identical vertical resolution, as taught by the divided display systems of Tagawa or Pawlowski because said feature is an obvious variation within the teaching of Nomura et al.'s two part display, consistent with the inventive intent to provide reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area, and further because both Tagawa and Pawlowski suggest said feature is useful for providing display sub-panels, as found in claim 5.

**As in claim 24**, Nomura et al. teaches of a method, **figures 1, 4, 8, and 10**,

comprising: displaying information related to a wireless communication device on a first portion of a display, **column 6 lines 17-55, column 9 lines 1-7, figure 4 item Area1;**

disabling the first portion of the display, **column 8 lines 43-65;**

and displaying information related to a personal digital assistant on a second portion of the display, **column 3 lines 53-59, column 4 lines 17-55, column 8 lines 43-65, figure 4 item Area2;**

Wherein Nomura et al. teaches of a cellular communications device comprising a display partitioned into two areas. The first area displays phone book data, and the second area displays electric field strength and battery power. As controlled by a CPU 10 or 100, the first and second display areas are capable of

Art Unit: 2629

simultaneously display, as well as exclusive display, such that the second display area may be active while the first display area is powered off. Further, the first and second display areas may simultaneously display phone book data. As shown in column 8 lines 43-65 and figure 8 of Nomura et al., the LCD controller drives driver 105c or 105d so as to display information on only area1 or area2. The selectivity for the active display areas of the device is controlled manually by user input to a switch 26, a key set 21, or stylus input, which is processed by the program executed on the CPU 10 or 100.

**However Nomura et al. fails to teach of** wherein said first and second sets of sub-panels comprise an **identical vertical resolution**.

**Nomura et al. does however teach** of said first and second sets of sub-panels comprising an identical horizontal resolution. With respect to the vertical resolution Nomura teaches of dividing the display 105 relative to the amount of information desired for the alternative mode of operation requiring less than the full display area. The identical vertical resolution of the sub display areas would have been an obvious design choice given the fact that providing alternative resolution sub display areas keep within the same inventive intent of Nomura. The inventive intent being reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area. The alternative resolution wherein the display areas Area1 and Area2 are equal in size, would allow for an equal vertical resolution given the horizontal resolution is also equal. Such an alternative would allow for reduced power operations when less than the full display area is being used. Therefore providing identical vertical resolution is facilitated by providing a display divided into two equally sized half's, which is an obvious design choice given Nomura inventive intent.

**Tagawa teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 3-7.

**Pawlowski teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 5.

Both Tagawa and Pawlowski are analogous art to Nomura et al. because they solve a similar problem directed towards display division and segmented driving. Both represent examples well known in the art of displays separated into two blocks and driven by different drive circuits.

**Therefore it would have been an obvious** design choice to the skilled artisan at the time of the invention to provide a display as taught by Nomura, with a first and second set of sub-panels that comprise identical vertical resolution, as taught by the divided display systems of Tagawa or Pawlowski because said feature is an obvious variation within the teaching of Nomura et al.'s two part display, consistent with the inventive intent to provide reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area, and further because both Tagawa and Pawlowski suggest said feature is useful for providing display sub-panels, as found in claim 24.

**Further as in claim 25**, Nomura et al. wherein disabling the first portion of the display occurs substantially simultaneously with displaying information on the second portion of the display, column 8 lines 43-65.

Art Unit: 2629

**As in claim 26**, Nomura et al. teaches of further comprising displaying information related to the wireless communication device after disabling the second portion of the display, column 7 lines 15-20.

**As in claim 27**, Nomura et al. teaches of further comprising displaying information related to the wireless communication device substantially simultaneously with displaying information related to the personal digital assistant on the second portion of the display, column 5 lines 49-67.

**As in claim 28**, Nomura et al. teaches of an article comprising: a storage medium having stored thereon instructions that when executed by a computing platform results in displaying information on a first portion of a display, wherein the information is related to a wireless communication module, **figure 1 item 12, column 7 lines 1-21;**

displaying information on a second portion of a display, wherein the information is related to an application program running on the computing platform, **figure 4 item Area 2, column 7 lines 1-20;**

and disabling the first portion of the display while displaying information on the second portion of the display, **column 7 lines 1-20, column 8 lines 55-61,**

Wherein Nomura et al. teaches of a cellular communications device comprising a display partitioned into two areas. The first area displays phone book data, and the second area displays electric field strength and battery power. As controlled by a CPU 10 or 100, the first and second display areas are capable of simultaneously display, as well as exclusive display, such that the second display

Art Unit: 2629

area may be active while the first display area is powered off. Further, the first and second display areas may simultaneously display phone book data. As shown in column 8 lines 43-65 and figure 8 of Nomura et al., the LCD controller drives driver 105c or 105d so as to display information on only area1 or area2. The selectivity for the active display areas of the device is controlled manually by user input to a switch 26, a key set 21, or stylus input, which are processed by the program executed on the CPU 10 or 100, said program being stored within the ROM 12 or 104.

**However Nomura et al. fails to teach of** wherein said first and second sets of sub-panels comprise an **identical vertical resolution**.

**Nomura et al. does however teach** of said first and second sets of sub-panels comprising an identical horizontal resolution. With respect to the vertical resolution Nomura teaches of dividing the display 105 relative to the amount of information desired for the alternative mode of operation requiring less than the full display area. The identical vertical resolution of the sub display areas would have been an obvious design choice given the fact that providing alternative resolution sub display areas keep within the same inventive intent of Nomura. The inventive intent being reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area. The alternative resolution wherein the display areas Area1 and Area2 are equal in size, would allow for an equal vertical resolution given the horizontal resolution is also equal. Such an alternative would allow for reduced power operations when less than the full display area is being used. Therefore providing identical vertical resolution is facilitated by providing a display divided into two equally sized half's, which is an obvious design choice given Nomura inventive intent.

**Tagawa teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 3-7.

**Pawlowski teaches of** a display wherein said first and second sets of sub-panels comprise an identical vertical resolution, figures 5.

Both Tagawa and Pawlowski are analogous art to Nomura et al. because they solve a similar problem directed towards display division and segmented driving. Both represent examples well known in the art of displays separated into two blocks and driven by different drive circuits.

**Therefore it would have been an obvious** design choice to the skilled artisan at the time of the invention to provide a display as taught by Nomura, with a first and second set of sub-panels that comprise identical vertical resolution, as taught by the divided display systems of Tagawa or Pawlowski because said feature is an obvious variation within the teaching of Nomura et al.'s two part display, consistent with the inventive intent to provide reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area, and further because both Tagawa and Pawlowski suggest said feature is useful for providing display sub-panels, as found in claim 28.

**As in claim 29**, Nomura et al. teaches wherein the instructions, when executed, further result in disabling the second portion of the display with a display controller, figure 10 item S5, column 9 lines 50-56.

Art Unit: 2629

**As in claim 30**, Nomura et al. teaches of wherein the instructions, when executed, further result in disabling the first segment driver and disabling a second segment driver, figure 10 item S2, column 9 lines 33-41.

**As in claim 31**, Nomura et al. teaches of wherein the instructions, when executed, further results in disabling the second portion of the display while displaying information on the first portion of the display, column 9 lines 50-56.

**As in claim 32**, Nomura et al. teaches of wherein the instructions, when executed, further results in substantially simultaneously displaying information on a first portion of the display and the second portion of the display, figure 4 and 12, column 9 lines 40-50.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 2, 3, and 6 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Nomura et al. (5881299) in view of Tagawa (5534892) and Pawlowski (5825341), **further in view of Uchida et al. (5877733).**



Art Unit: 2629

**As in claims 2, 3, and 6**, Nomura et al. teaches of an information device as applied above to claims 1 and 5, wherein the first and second display portions are selectively enabled as shown in figure 1. However Nomura et al. fails to explicitly teach of having a second power source which powers down a second set of segment drivers.

**Uchida et al. teaches of** a wireless telecommunications device providing a liquid crystal display panel portioned into a first and second portions, wherein each portion has a respective first and second driver and power supplies, figure 1 items 1-5. The display system of Uchida et al. is applicable to the device taught by Nomura because Uchida also teaches of a wireless communication device having a partitioned display, wherein each display portion is driven by a separate driver. Therefore both Uchida and Nomura solve the problem of providing a useful partitioned and segment driven display. Uchida further teaches of the well known use for providing a second power source in a partitioned segment driven display.

Nomura et al. fails to teach of a second power source, however, they teach of a power supply controller that partitions the power supply connections to the first and second display portion drivers, figure 1 item 20, and figure 8 item 101. An obvious design choice available to the skilled artisan would be to provide a second power in the alternative to partitioning a single supply source. This design alternative would make the power distribution more efficient given the display portions differing size and therefore differing power requirements. The smaller display segment would obviously require a smaller power source.

**Therefore it would have been obvious** to the skilled artisan at the time of the invention to combine the second power supply as taught by Uchida with the

Art Unit: 2629

display system of Nomura because Uchida suggests a second power supply is useful in a segmented display, and further it provides an efficient design alternative to the problem faced in Nomura's need for providing a segmented display, wherein each segment has a different power requirement relative to the segment size, as found in claims 2-4 and 6.

**As in claim 2**, Nomura et al. fails to teaches of wherein said power control block disables a second power source which powers down a second set of said segment drivers, said powering down disabling a second set of sub-panels from outputting pixels, said power control block disabling said second power source upon receiving a command from said CPU that said second set of sub-panels are to be powered down. However, for the same reasons of obviousness in view of Uchida as applied above, the modification of Nomura et al. to include a second source supply, while maintaining to the provided selective power saving functionality, would make the above feature inherent to a combination of Nomura et al. and Uchida, and therefore obvious to the skilled artisan at the time of the invention.

**As in claim 3**, Nomura et al. fails to teaches of wherein said first power source and said second power source are independently switched by said power-control block to enable outputting of pixels on said first set of sub-panels and said second set of sub- panels, respectively. However, for the same reasons of obviousness in view of Uchida as applied above, the modification of Nomura et al. to include a second source supply, while maintaining to the provided selective power saving functionality, would make the above feature inherent to a combination of Nomura et al. and Uchida, and therefore obvious to the skilled artisan at the time of the invention.

**As in claim 6**, Nomura fails to teach of wherein said power control block disables a second power source which powers down said first set of segment drivers, said powering down disabling said first display panel. However, for the same reasons of obviousness in view of Uchida as applied above, the modification of Nomura et al. to include a second source supply, while maintaining to the provided selective power saving functionality, would make the above feature inherent to a combination of Nomura et al. and Uchida, and therefore obvious to the skilled artisan at the time of the invention.

Further, wherein Nomura teaches of wherein the power controller controls a first and second power signal lines to a first and second segments, and as broadly interpreted, said first and second power signal lines can be interpreted as a first and second power source.

4. **Claims 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al. (5881299) in view of Tagawa (5534892).**

**As in claim 34, Nomura teaches of** in an information device, **figures 1-4, 7, and 8**, having a CPU, **figure 1 item 10**, a display controller and a display panel, **figure 1 items 14 and 18**, said display panel split logically into sub-panels, **figure 1 items Area1 and Area2**,

an apparatus comprising: a plurality of segment drivers coupled between said display panel and said display controller, **figure 1 item 18 (d, e, c, b)**,

said plurality of segment drivers to receive input data from said display controller and to translate said input data into pixels displayable on said display panel, **column 4 lines 6-23, figure 1 items Area2 and Area1**;

and a power control block coupled to said CPU and to said plurality of segment drivers to disable a first power source to power down the first set of said plurality of segment drivers to disable a first set of sub-panels of said display panel from outputting pixels, **figure 1 items 20 and 22, figure 1 area2, column 4 lines 23-32, column 6 lines 23-31**;

and to enable a second power source to power the second set of said plurality of segment drivers to enable a second set of sub-panels of said display panel to output pixels, **column 4 lines 18-46**, wherein the power controller controls a first and second power signal lines to a first and second segments

said first set of sub-panels to display information relevant to personal digital assistant functions of the information device, **figure 4 Area2, column 5 lines 20-25 and 63-65, column 6 lines 43-54**,

Art Unit: 2629

and said second set of sub-panels to display information relevant to cellular communications functions of the information device, **figure 4 Area1, column 5 lines 20-25 and 63-65, column 6 lines 43-54.**

**However Nomura fails to explicitly teach of** each of the plurality of segment drivers having a positive power rail pin and one or more logic pins to receive a respective one or more voltages to provide a respective one or more logic levels; or receiving data based at least in part on the one or more logic levels; or first and second power source being coupled to the positive power rail pins of each of a first and second set of said plurality of segment drivers.

**Tagawa teaches of a** segment driver well known in the art of segmented displays wherein each segment driver has a positive power rail pin figure 9A item 122 (V0 to V5) and one or more logic pins to receive a respective one or more voltages to provide a respective one or more logic levels, figure 9A item 122 (E101, MODE, XLP); or receiving data based at least in part on the one or more logic levels, figure 9A item 122 (MODE, E101); or being coupled to the positive power rail pins of each of a first and second set of said plurality of segment drivers, figure 9A item 122 (V0 through V5).

**Wherein it would have been obvious** to the skilled artisan at the time of the invention that the segment drivers as taught by Nomura would provide for inputs as detailed by Tagawa, because Nomura teaches of a segmented display that performs display segmentation based on data input and logic control of segment drives by a LCD and Power Supply controller. Tagawa provides the segment driver detail that Nomura is silent on that the skilled artisan would obviously use to provide a segmented display as taught by Nomura, given the disclosed power and data control, as found in claim 34.

**As in claim 35, Nomura in view of Tagawa teaches**, wherein said power control block is to disable the second power source to power down the second set of said plurality of segment drivers to disable the second set of sub-panels from outputting pixels, said power control block to disable said second power source upon receiving a command from said CPU that said second set of sub-panels are to be powered down, **column 4 lines 18-46**, wherein the power controller controls a first and second power signal lines to a first and second segments.

**As in claim 36, Nomura in view of Tagawa teaches**, wherein said first power source and said second power source are independently switched by said power-control block to enable outputting of pixels on said first set of sub-panels and said second set of sub-panels, respectively, **column 4 lines 5-46**, wherein the first and second display areas are independently driven and controlled by said power controller.

### ***Reissue Applications***

5. Upon further review the "Declaration of Inventor" pursuant to 37 CFR § 1.131 filed on 5/9/2007 lacks sufficiency to overcome the rejection in view of Nomura et al.. The Applicant fails to account for the entire period during which diligence is required. The Applicant is reminded that a two day period lacking activity has been held to be fatal. The declaration filed by the Applicant fails to sufficiently address all actual dates relied on to establish diligence as required by MPEP 715.07, part II. *"What is meant by diligence is brought out in Christie v. Seybold, 1893 C.D. 515, 64 O.G. 1650 (6th Cir. 1893). In patent law, an inventor is either diligent at a given time or he is not diligent; there are no degrees of diligence. An applicant may be diligent within the meaning of the patent law when he or she is doing nothing, if his or her lack of activity is excused. Note, however, that the record must set forth an explanation or excuse for the inactivity; the USPTO or*

*courts will not speculate on possible explanations for delay or inactivity. See In re Nelson, 420 F.2d 1079, 164 USPQ 458 (CCPA 1970). Diligence must be judged on the basis of the particular facts in each case. See MPEP § 2138.06 for a detailed discussion of the diligence requirement for proving prior invention.” Further, “an applicant must account for the entire period during which diligence is required. Gould v. Schawlow, 363 F.2d 908, 919, 150 USPQ 634, 643 (CCPA 1966) (Merely stating that there were no weeks or months that the invention was not worked on is not enough.); In re Harry, 333 F.2d 920, 923, 142 USPQ 164, 166 (CCPA 1964) (statement that the subject matter “was diligently reduced to practice” is not a showing but a mere pleading). A 2-day period lacking activity has been held to be fatal. In re Mulder, 716 F.2d 1542, 1545, 219 USPQ 189, 193 (Fed. Cir. 1983) ( 37 CFR 1.131 issue).“ Therefore due to the Applicants insufficient declaration filed on 5/9/2007, the rejection over Nomura et al. is maintained.*

6. The reissue oath/declaration filed on 3/19/2001 is defective because the error which is relied upon to support the reissue application is not an error upon which a reissue can be based. See 37 CFR 1.175(a)(1) and MPEP § 1414. The Applicant must note that the error set forth in the originally filed declaration is no longer applicable to the claims in their current state. The declaration filed on 3/19/2001 fails to specify at least one error being corrected in this reissue. Further, due to claim amendments filed after the filing of the 3/19/2001 declaration, a supplemental declaration in accordance with MPEP 1414.01 is required. The Applicant can correct the declaration deficiencies in one combined declaration. It is recommended that the Applicant use FORM PTO/SB/51.
7. Claims 1-32 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175. The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

8. This application is objected to under 37 CFR 1.172(a) as lacking the written consent of all assignees owning an undivided interest in the patent. The consent of the assignee must be in compliance with 37 CFR 1.172. See MPEP § 1410.01. A proper assent of the assignee in compliance with 37 CFR 1.172 and 3.73 is required in reply to this Office action.

### ***Response to Arguments***

9. Applicant's arguments filed on 9/16/2008 are in part persuasive. As stated by the Applicant Nomura et al. fails to teach of wherein said first and second sets of sub-panels comprise an **identical vertical resolution**. Therefore a new non-final office action is required to address this missing limitation. Said feature, however, would have been an obvious design choice as shown in the above obviousness rejection over Nomura et al. in view of Tagawa and Pawlowski. Providing identical vertical resolution is facilitated by dividing the complete display into two equally sized half's. This modification would have been an obvious design choice given the inventive intent of Nomura to reduced power in the device mode requiring less than the full display area, and seamless display of information in the mode requiring the full display area. Further, Nomura's intent in combination with the teachings of both Tagawa and Pawlowski, each demonstrating the usefulness of equally sized divisions of a display, and as a consequence of said division, therefore providing identical vertical resolution.

In regard to the reissue oath/declaration the Examiner acknowledges the Applicant's intent to wait until the case is in condition of allowance to submit a cumulative supplemental reissue oath/declaration pursuant to 37 CFR 1.75(b)(1) as is suggested by MPEP 1444.



Art Unit: 2629

In regard to written consent the Applicant argues an assent of the assignee filed on November 22, 2002 (the Examiner assumes the date of November 22, 2000 was intended), in combination with the subsequent filing on May 9, 2007 of documentation providing evidence of the complete chain of title, in the form of the 37 CFR 1.131 Affidavit, meets the consent requirement. The Examiner disagrees. A proper assent of the assignee in compliance with 37 CFR 1.172 (a) and 3.73(b)(1) is required in reply to this Office action. The submission of the documentary evidence must be accompanied by a statement affirming that the documentary evidence of the chain of title from the original owner to the assignee was or concurrently is being submitted for recordation pursuant to section 3.11; or a statement specifying where documentary evidence of a chain of title from the original owner to the assignee is recorded in the assignment records of the Office.

The Examiner acknowledges the Applicants updated formatting of the specification and claims in the required two column format per MPEP 1411.

The Applicant argues: "this application is now in condition for allowance". The Examiner disagrees. Review of the record has found some insufficiencies with the instant reissue application that preclude allowance. The "Declaration of Inventor" pursuant to 37 CFR § 1.131 filed on 5/9/2007 lacks sufficiency to overcome the rejection in view of Nomura et al.. The Applicant fails to account for the entire period during which diligence is required. The declaration filed by the Applicant fails to sufficiently address all actual dates relied on to establish diligence as required by MPEP 715.07, part II. Therefore the Nomura et al. reference continues to support a case for obviousness. Claims 1, 4, 5, and 24-32 stand rejected as being anticipated over Nomura et al. in view of Tagawa and Pawlowski, while claims 2, 3, and 6 stand rejected as being obvious over Nomura et al. in view of Tagawa and Pawlowski, further in view of Uchida et al.,

Art Unit: 2629

and claims 34-36 stand rejected as being obvious over Nomura et al. in view of Tagawa.

The Examiner acknowledges the IDS filed on 9/30/2008. The prior art 02-105194 by Sakanishi is considered relevant to the Applicant's inventive concept.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **David L. Lewis** whose telephone number is **(571) 272-7673**. The examiner can normally be reached on MTWTHF from 8 to 5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached on **(571) 272-7681**. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571)-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

---

Examiner: David L. Lewis  
February 28<sup>th</sup>, 2010  
/David L Lewis/  
Primary Examiner, Art Unit 2629

Application/Control Number: 09/721,790  
Art Unit: 2629

Page 26